

## MEMO

TO: District Manager

FROM: Director of Operations

SUBJECT: OPERATIONS DEPARTMENT STATUS REPORT  
JUNE 2019

DATE: JULY 18, 2019

### RECOMMENDATION:

It is recommended that the District Manager review and file the Operations Department Project Status Report for the month of June 2019.

### BACKGROUND:

#### PROBATION TANK REPLACEMENT

The contractor is in full construction on the replacement of the Probation tank. The contractor completed grading, digging and compacting of the tank site. The retaining walls are in construction and expected to be done in July. Construction is expected to continue until October 2019.

The Old 100,000 gallon redwood tank at the probation site was in very poor condition and was leaking towards the end of its life at an estimated 35-40 gallons per minute. Temporary poly tanks were installed by District staff in the summer of 2018. The system is running on minimal storage through construction. The residents of this area have been cautioned to conserve water during this time.

#### PASO WELL #8

The new Paso Well #8 construction continues. The District has been working with the concrete contractor on construction of the Well head pad and chlorination building. The Well drilling contractor welded on the Well flange spool for the concrete contractor to be able to complete the Well pad. Expected completion of the Well is late August.

Paso Well #8 is a replacement to Paso Well #6 that began splitting in its casing in 2015, which was allowing sand to overcome the pump and motor. Many attempts to fix and seal the casing on the Well were unsuccessful leading to full replacement of the Well.

## FELTON WATER SYSTEM WATER METER REPLACEMENT

Domestic water meters are being replaced as existing meters have reached their life expectancy. Meters are being changed to the new Beacon "Eye on Water" system that will allow customers to monitor their water usage over the internet.

## LOMPICO PRV'S

District staff replaced three main line valves that did not function. The replacement of these valves is crucial to this project for isolation of the PRV stations during construction.

The District is in contract to have the Lompico PRV's replaced as part of the assessment. Having functioning PRV's is important to a system like this with a large span of elevations. Pressures have to be reduced as the water gets lower in elevation from the tanks as they gain pressure the lower the elevation gets. With non-functioning PRV's the pressure gets very high in the lower elevations and causes failure of main lines and service lines.

## DISTRICT VEHICLES

The operations department took possession of the two new replacement utility body vehicles in the month of June. One of these vehicles is a replacement for District truck #226, a Ford F250 with 162,000 miles and no utility body or lift gate. The second truck is a new truck for the addition of a treatment operator to the crew.

## MAINTENANCE ISSUES

### System Wide

- 8995 Redwood St. did final install of temporary water line.
- Removed, repaired and reinstalled high service pump at Kirby water treatment plant.
- 6 inch main break 7171 Hihn Rd. Ben Lomond.
- 4 inch main break Highway 9 and Kings Creek Rd. Boulder Creek.
- Removed dead end water line Alta Via Rd. Boulder Creek.
- Full Service line replacement 11111 Vera Ave. Lompico.
- Restored service to an old service at 10065 Highway 9 Ben Lomond.
- Meter relocation 232 Caledonium Ave. Ben Lomond.
- District fiscal yearend inventory count complete.
- Fixed approximately 16 other various leaks throughout the District.

James Furtado

Director of Operations

# SAN LORENZO VALLEY WATER DISTRICT

## PRODUCTION COMPARRISON

Source	June-19	May-19	June-13	Difference This Year To 2013
<b>North System</b>				
<b>Surface Water Sources</b>				
Foreman Creek	21,052,220	20,706,672	16,483,000	
Peavine Creek + Hydro	775,923	5,037,060	2,974,000	
Clear Creek	5,878,714	6,141,161	0	
Sweetwater Creek	3,919,143	4,094,107	0	
<b>Sub-Total (Streams)</b>	<b>31,626,000</b>	<b>35,979,000</b>	<b>19,457,000</b>	62.54%
<b>Wells (North)</b>				
Olympia No. 2	1,289,000	-	8,416,000	
Olympia No. 3	329,000	-	13,697,000	
Quail Well No. 4-A	690,000	63,000	0	
Quail Well No. 5-A	240,200	5,700	798,700	
<b>Sub Total North Wells</b>	<b>2,548,200</b>	<b>68,700</b>	<b>22,911,700</b>	-88.88%
<b>South System Wells</b>				
Pasatiempo 5A	-	5,975,200	N/A	
Pasatiempo 6	-	-	10,420,000	
Pasatiempo 7	1,508,000	2,382,000	3,249,000	
<b>Sub Total Pasatiempo Wells</b>	<b>1,508,000</b>	<b>8,357,200</b>	<b>13,669,000</b>	-88.97%
<b>North South All Sources Combined</b>	<b>35,682,200</b>	<b>44,404,900</b>	<b>56,037,700</b>	-36.32%
<b>Felton System - Surface Water</b>				
Fall Creek	4,606,162	3,990,780	10,380,000	
Bennett Spring	2,083,180	3,494,656	5,898,000	
Bull 1 & 2	1,274,592	1,587,256	1,989,900	
<b>Total Felton System Sources</b>	<b>7,963,934</b>	<b>9,072,692</b>	<b>18,267,900</b>	-56.40%
<b>Manana Woods System</b>				
Well 1	-	-	0	
<b>Total Manana Woods Sources</b>	<b>-</b>	<b>-</b>	<b>0</b>	
<b>Sub - Total Production</b>				
<b>North / Felton / Manana</b>	<b>43,646,134</b>	<b>53,477,592</b>	<b>74,305,600</b>	-41.26%
<b>Surface</b>	<b>39,589,934</b>	<b>45,051,692</b>	<b>37,724,900</b>	4.94%
<b>Wells</b>	<b>4,056,200</b>	<b>8,425,900</b>	<b>36,580,700</b>	-88.91%
<b>Total Surface Water Percentage</b>	<b>90.71</b>	<b>84.24</b>	<b>50.77</b>	78.66%
<b>Total Wells Percentage</b>	<b>9.29</b>	<b>15.76</b>	<b>49.23</b>	-81.12%

**SAN LORENZO VALLEY WATER DISTRICT  
PRODUCTION BY SYSTEM  
+/- INTERTIES  
May 2019**

North System All Sources	<u>35,682,200</u>
Interties IN +	<u>20</u>
Interties OUT -	<u>2,761,758</u>
<b>TOTAL NORTH SYSTEM</b>	<b><u>32,920,462</u></b>
Felton Water system All Sources	<u>7,963,934</u>
Interties IN +	<u>0</u>
Interties OUT -	<u>0</u>
<b>TOTAL FELTON SYSTEM</b>	<b><u>7,963,934</u></b>
Manana Woods System	
Manana Woods Well 1	<u>0</u>
Interties IN +	<u>0</u>
<b>TOTAL MANANA WOODS</b>	<b><u>0</u></b>

**SAN LORENZO VALLEY WATER DISTRICT**  
**INTERTIE USAGE**  
**May 2019**

**INTERTIE 2**

SLVWD to SVWD 0

SVWD to SLVWD 0

**INTERTIE 3**

SLV SOUTH to SLV NORTH 20

SLV NORTH to SLV SOUTH 362,503

**INTERTIE 4**

SLVWD to MHWD 0

MHWD to SLVWD 0

**INTERTIE 6**

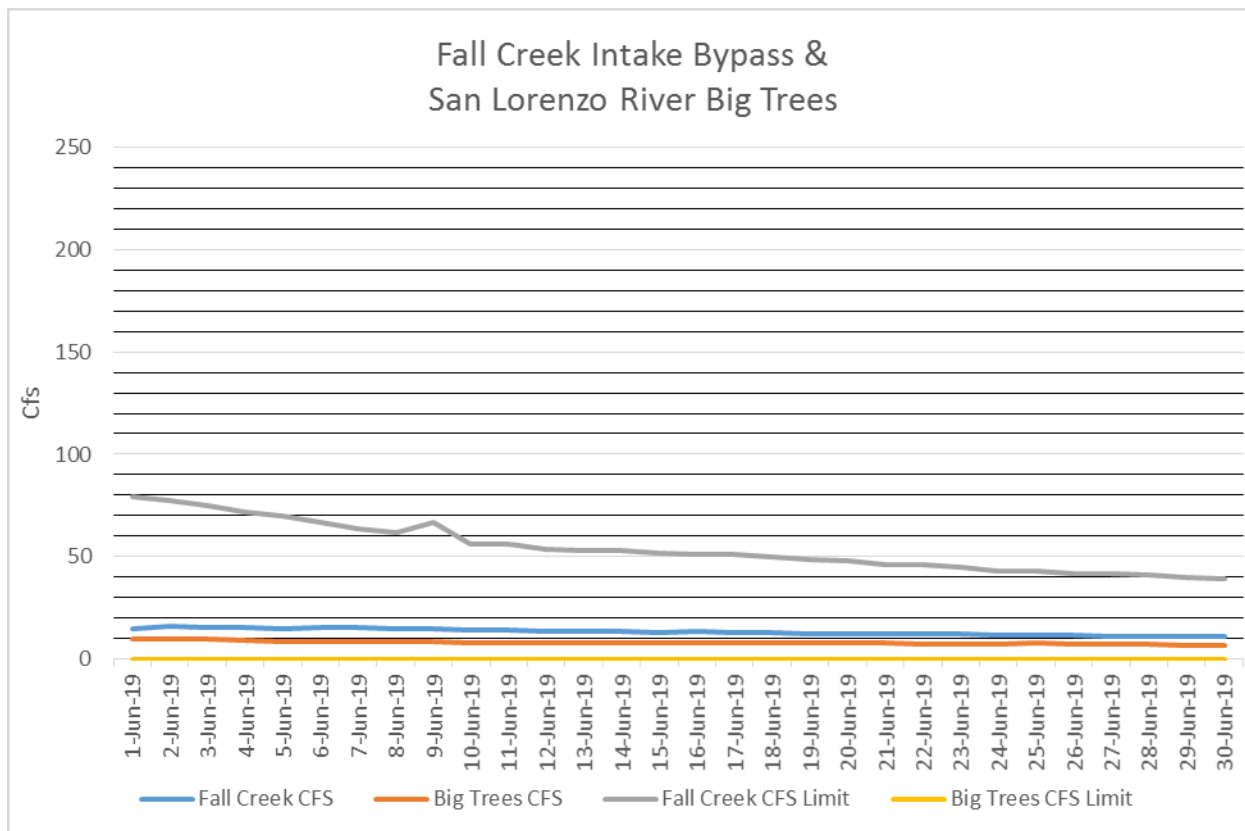
SLV NORTH to SLV FELTON -

SLV FELTON to SLV NORTH -

**LOMPICO INTERTIE**

SLV NORTH to LOMPICO 2,399,255

# Fall Creek Intake June 2019



## Normal Rainfall Fall Creek Intake Bypass Requirements

April 1 through October 31      1.0 cubic feet per second

November 1 through March 31      1.5 cubic feet per second

## Dry Conditions Fall Creek Intake Bypass Requirements

April 1 through October 31      0.5 cubic feet per second

November 1 through March 31      0.75 cubic feet per second

Number of Days in month 0.5 cfs or below, ZERO days

## San Lorenzo River USGS Big Trees Flow Requirements

September 11 cubic feet per second

October 26 cubic feet per second

November 1 through May 31      21 cubic feet per second

June - August No Requirements

## Fall Creek Intake June 2019

For the protection of fish and wildlife, during the period: (a) April 1 through October 31 bypass a minimum of 0.5 cfs; (b) November 1 through March 31 bypass a minimum of 1.5 cfs past the Fall Creek point of diversion. The natural streamflow shall be bypassed whenever it is less than 1.5 cfs; provided, however, that during a dry year, the bypass requirement shall be reduced from 1.5 to 0.75 cfs. A dry year is defined on a monthly basis of cumulative runoff beginning October 1 of each season in the San Lorenzo River at the USGS gage at Big Trees. These runoff figures are based on approximately 50 percent of normal runoff as the dividing level between normal and dry year runoff and are as follows:

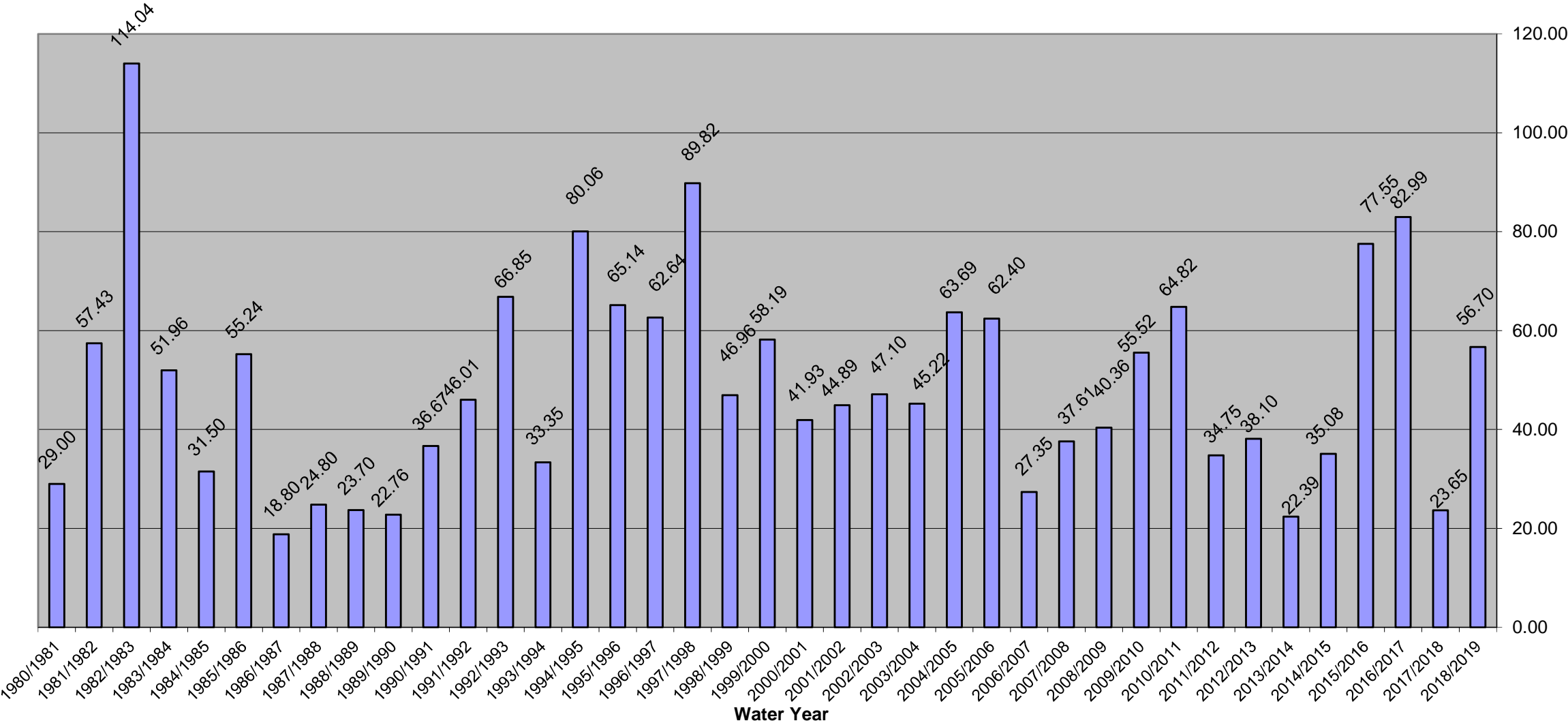
- November 1 for the month of October 500 af
- December 1 for October-November, inclusive 1,500 af
- January 1 for October-December, inclusive 5,000 af
- February 1 for October-January, inclusive 12,500 af
- March 1 for October-February, inclusive 26,500 af

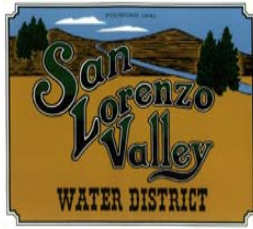
Fall Creek Weir Measurement											
	Month:	June		Year:	2019	Big Trees > 26,500 Acre-ft Oct-Feb Normal Year			Big Trees <26,500 Acre-ft Oct-Feb Dry Year		
Date	Time	Initials	Pump #	Fall Cr. GPM into Kirby plant	Weir Board Height (inches)	Fall Creek Bypass (CFS)	Big Trees Bypass (CFS)	Rainfall (Felton gauge)	Met Fall Cr, Bypass Requirement: Normal Year April 1 - Oct 31 1.0 cfs; Nov 1 - March 31 1.5 cfs Dry Year April 1 - Oct 31 0.5 cfs Nov. 1 - March 31 0.75 cfs (yes/no)	Met Big Trees Requirement Nov-May 20cfs Sept 10 cfs Oct 25 cfs (yes/no)	Notes
1	1300	JG	2	98	25	9.73	79.4	0	Yes	Yes	
2	1130	JG	2	71	25	9.69	77.3	0	Yes	Yes	
3	0830	KS	2	85	25	9.60	75.2	0	Yes	Yes	
4	0740	KS	2	101	25	9.12	72.0	0	Yes	Yes	
5	1230	JG	2	116	25	8.90	69.9	0	Yes	Yes	
6	0800	JG	1	93	25	8.87	66.8	0	Yes	Yes	
7	0815	JG	1	70	25	8.78	63.8	0	Yes	Yes	
8	0820	JT	1	103	25	8.64	61.9	0	Yes	Yes	
9	0745	JT	1	118	25	8.49	66.8	0	Yes	Yes	
10	1400	JG	1	201	25	8.09	56.3	0	Yes	Yes	
11	0800	JG	1	168	25	8.19	56.3	0	Yes	Yes	
12	1010	SS	1	233	25	7.95	53.7	0	Yes	Yes	
13	0815	JG	1	193	25	7.98	52.8	0	Yes	Yes	
14	0815	JG	1	99	25	8.17	52.8	0	Yes	Yes	
15	0720	KS	1	142	25	8.03	51.9	0	Yes	Yes	
16	0700	KS	1	170	25	7.86	51.1	0	Yes	Yes	
17	0800	JG	1	167	25	7.85	51.1	0	Yes	Yes	
18	0800	JG	1	157	25	7.78	50.2	0	Yes	Yes	
19	1100	JG	1	131	25	7.78	48.6	0	Yes	Yes	
20	0900	JG	1	130	25	7.71	47.8	0	Yes	Yes	
21	0830	KS	1	123	25	7.98	46.2	0	Yes	Yes	
22	0920	HO	1	121	25	7.60	46.2	0	Yes	Yes	
23	0920	HO	1	145	25	7.50	44.6	0	Yes	Yes	
24	0900	KS	1	170	25	7.29	43.1	0	Yes	Yes	
25	0800	SS	1	173	25	7.95	43.1	0	Yes	Yes	
26	0930	KS	1	120	25	7.29	41.6	0	Yes	Yes	
27	0800	JG	1	152	25	7.17	41.6	0	Yes	Yes	
28	0845	SS	1	141	25	7.13	40.9	0	Yes	Yes	



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San Lorenzo Valley Water District  
Annual Rainfall History Graph



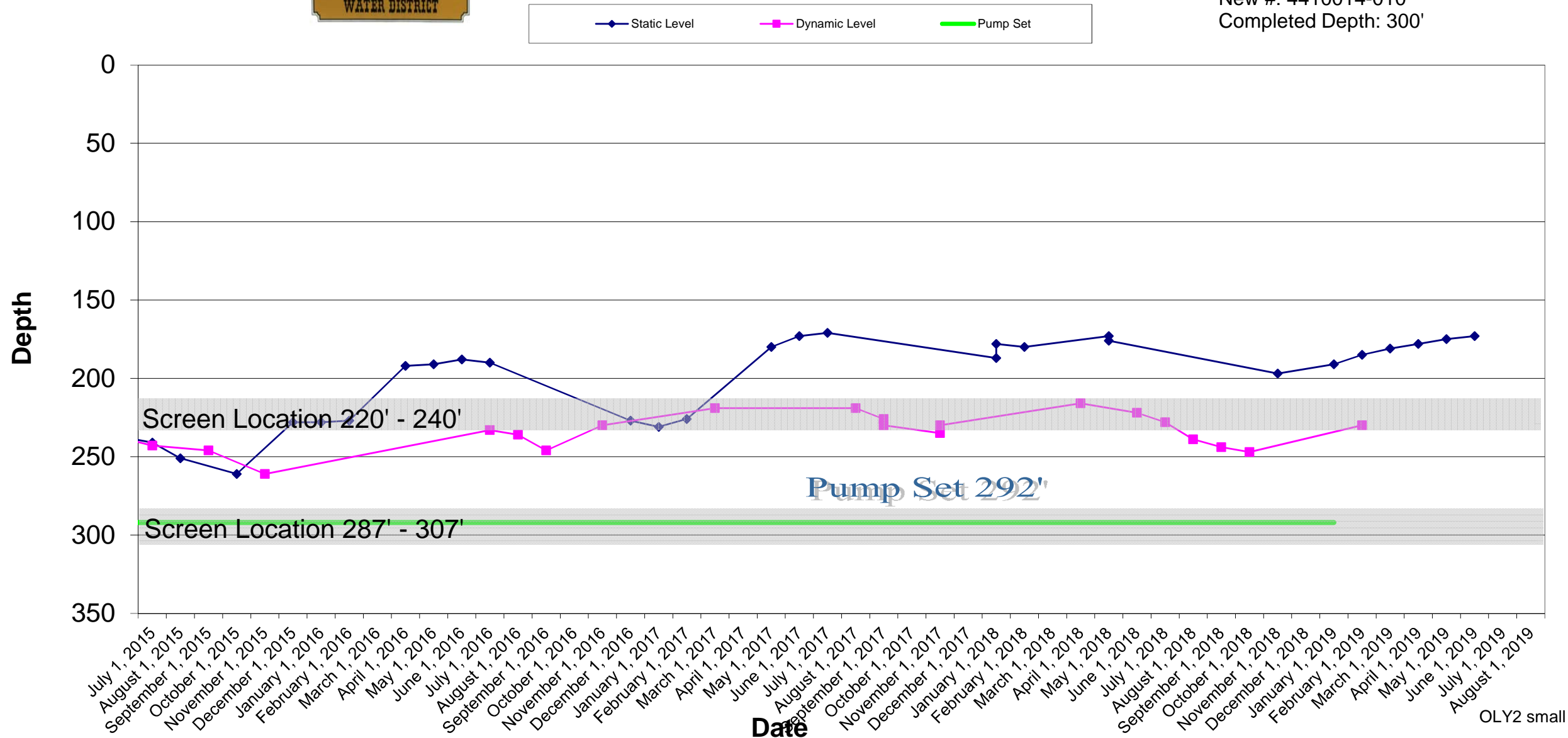


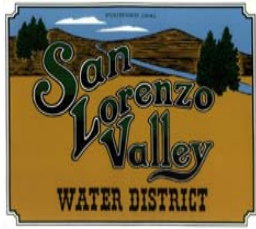
# SAN LORENZO VALLEY WATER DISTRICT

## Well Drawdown Report

### Olympia 2

Location: 7701 E. Zayante Rd.  
Elevation: 525'  
Installed: April 28, 1980  
State Well #:10S/O2W-11P01  
New #: 4410014-010  
Completed Depth: 300'



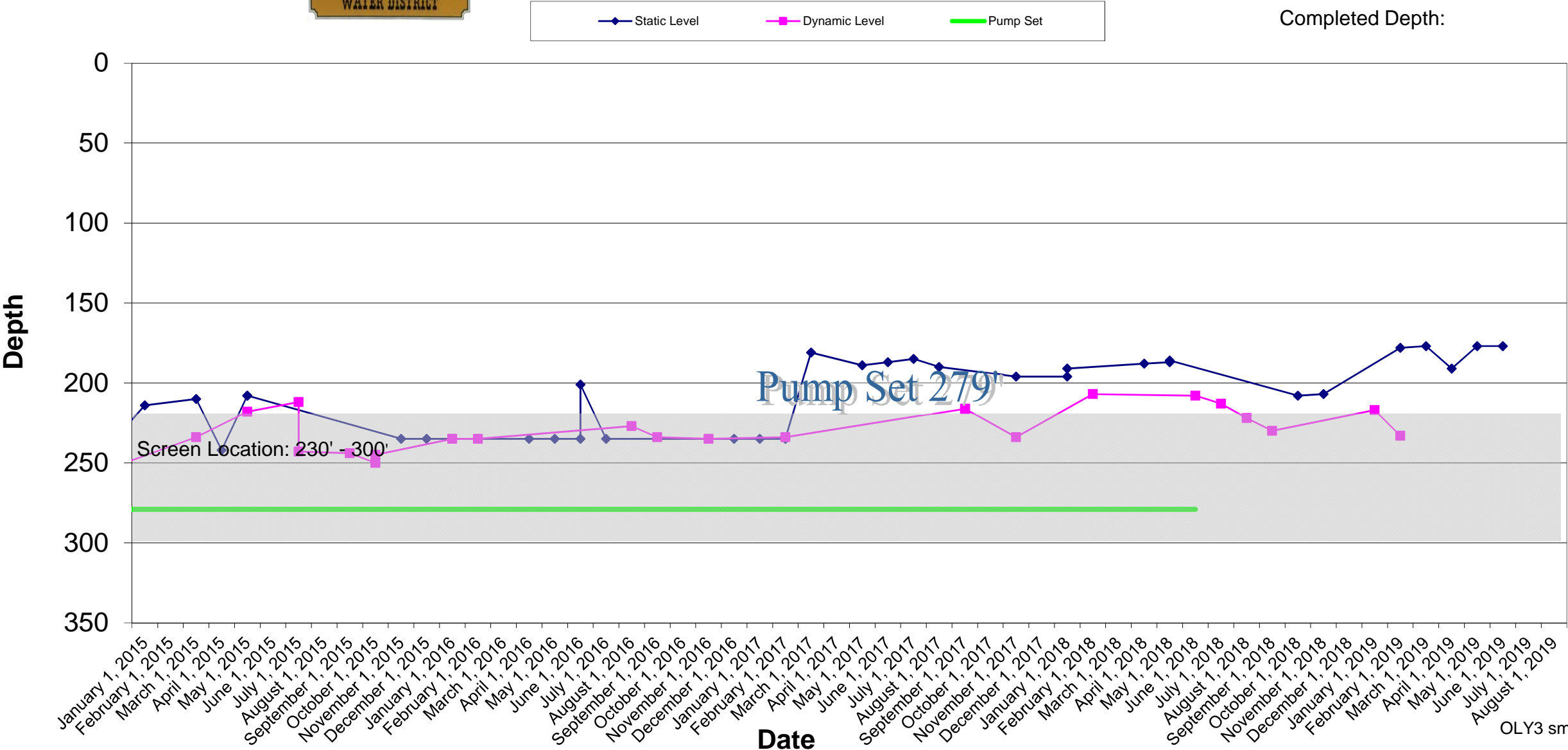


# SAN LORENZO VALLEY WATER DISTRICT

## Well Drawdown Report

### Olympia 3

Location: 7701 E. Zayante Rd  
Elevation: 538' Mean Sea Level  
Installed: 8-15-90  
State Well #: 4410014-022  
Completed Depth:



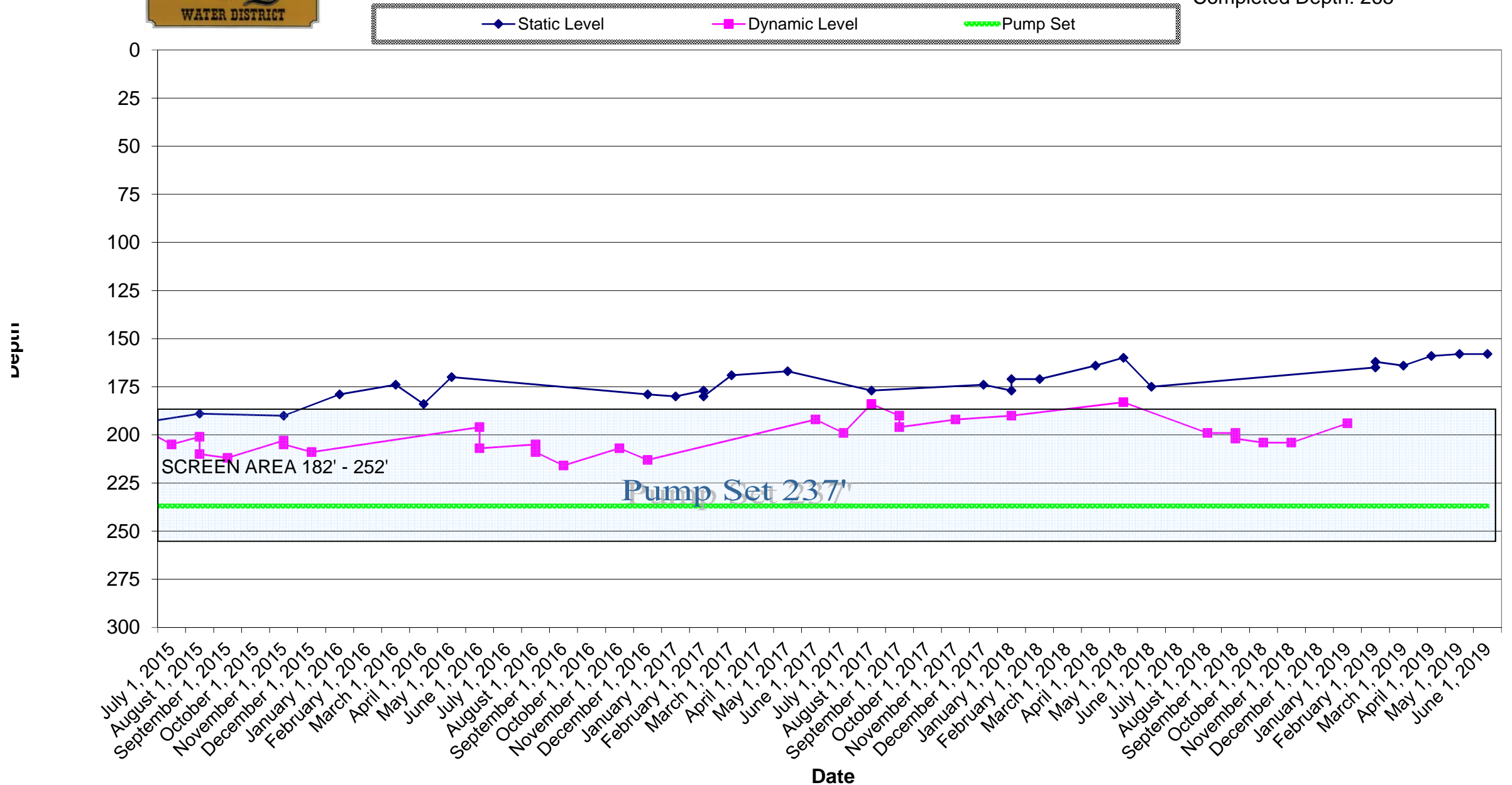


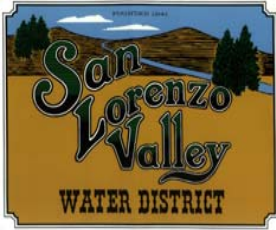
# SAN LORENZO VALLEY WATER DISTRICT

## Well Drawdown Report

### Quail Well 4-A

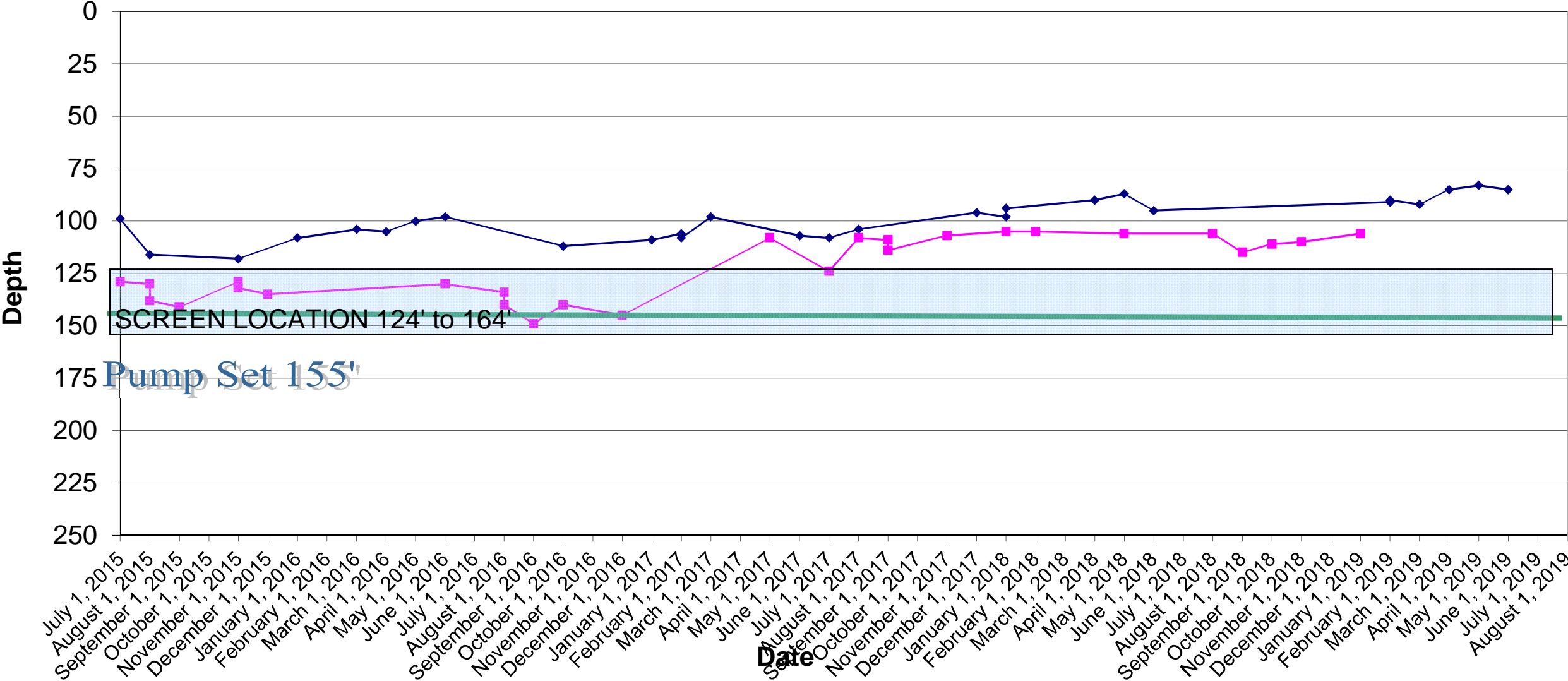
Location: Cumora Ln. Ben Lomond  
Elevation: 596.54 ft @ Pad  
Installed: 6-07-2001  
State Well #: 4410014-026  
Completed Depth: 265





**SAN LORENZO VALLEY WATER DISTRICT**  
**Well Drawdown Report**  
**Quail Well 5-A**

Location: 1161 Quail Hollow Rd.  
Ben Lomond  
Elevation: 517.65 ft. @ Pad  
Installed: March 2000  
State Well #: 4410014-025  
Completed Depth: 174'



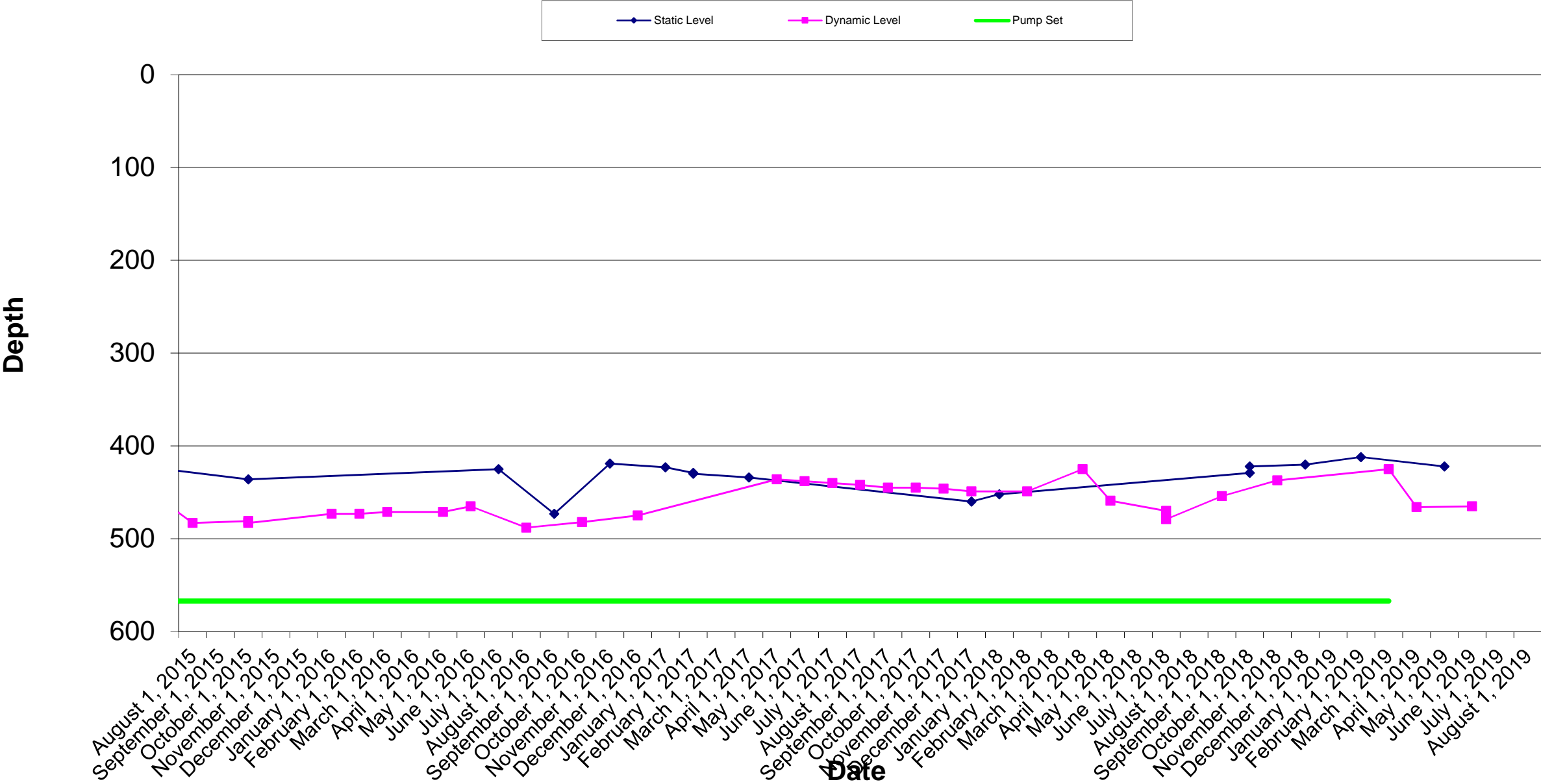


# SAN LORENZO VALLEY WATER DISTRICT

## Well Drawdown Report

### Pasatiempo 5-A

Location: So. Of 3650 Graham Hill Rd  
Elevation: 752'  
Installed 1-1-14  
State Well #:4410014-014  
Completed Depth: 710'



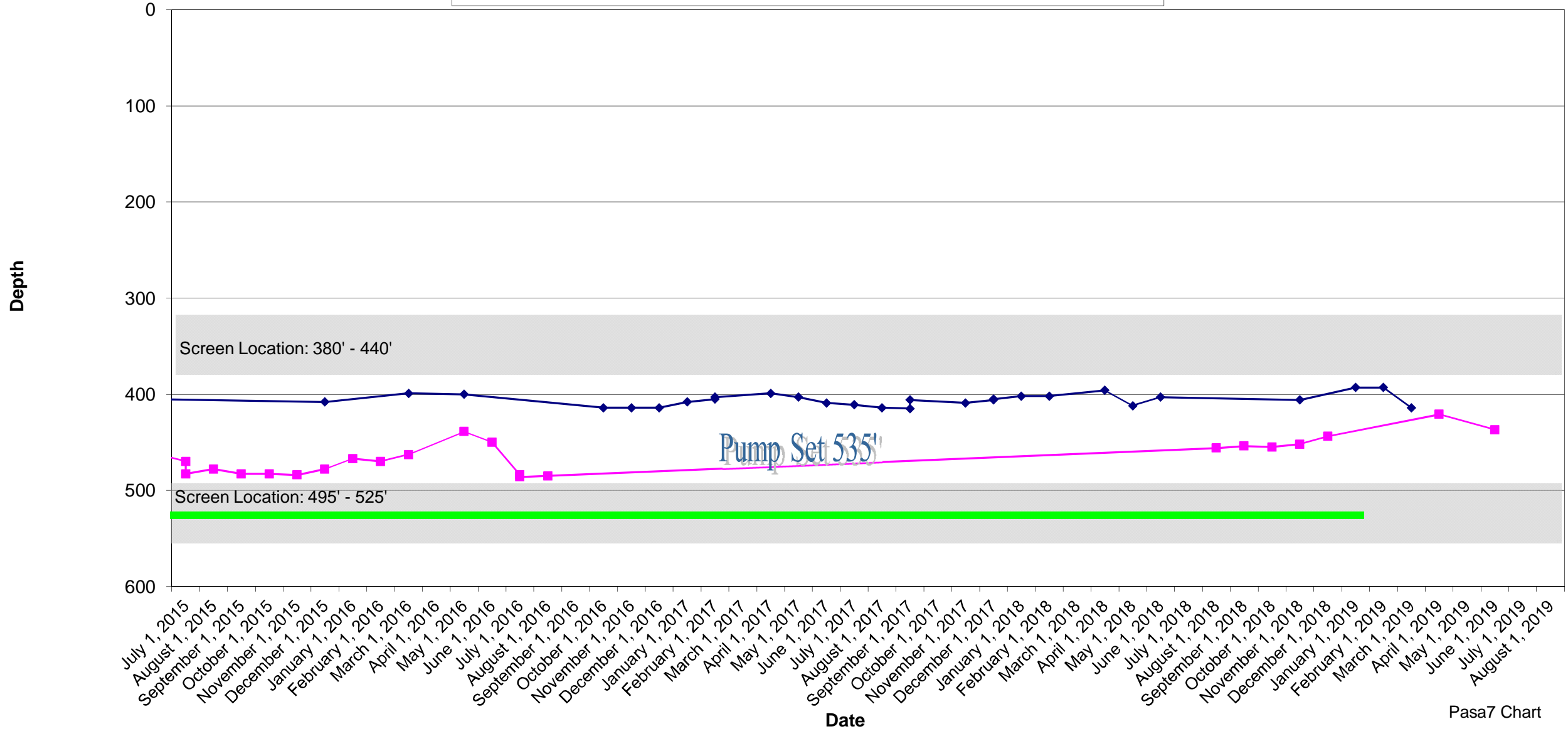


# SAN LORENZO VALLEY WATER DISTRICT

## Well Drawdown Report

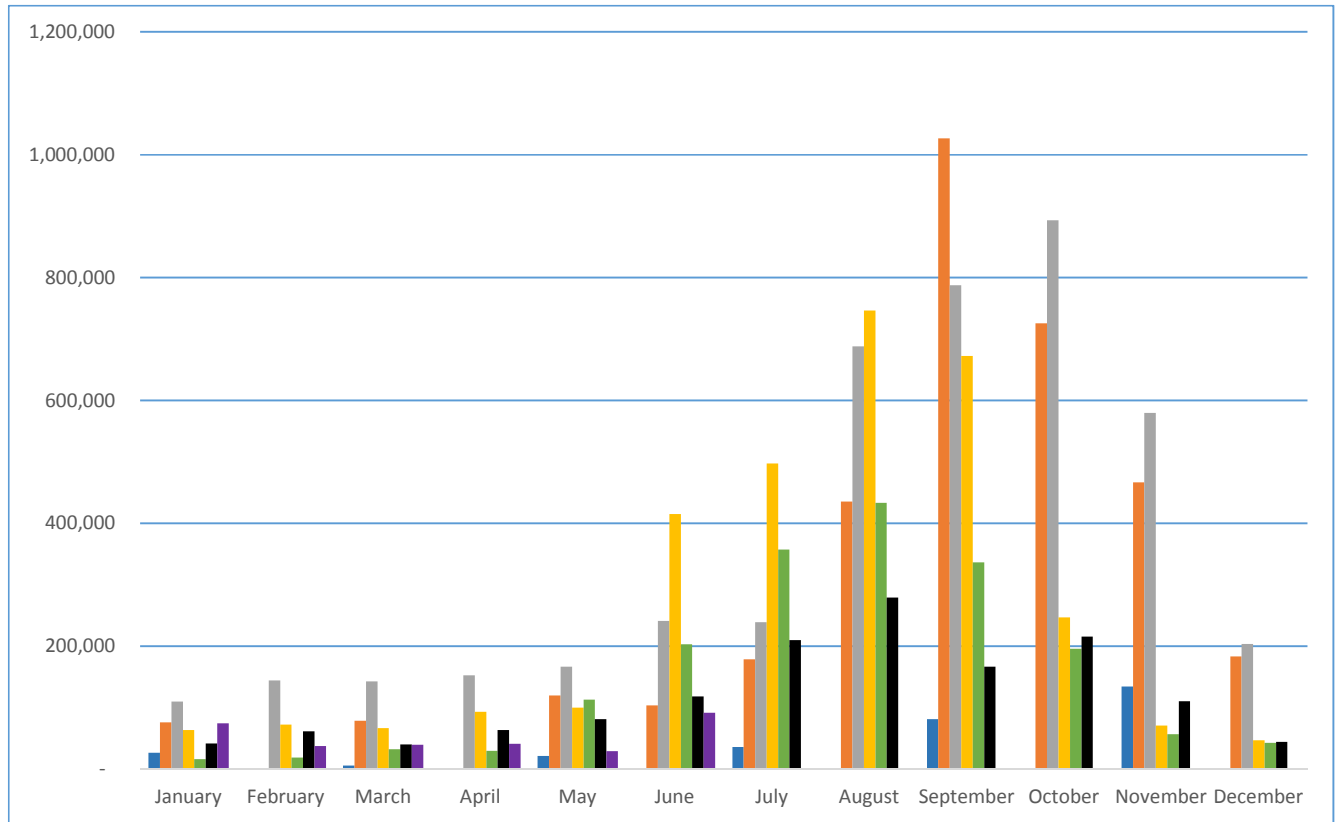
### Pasatiempo 7

Location: South of Probation  
Center  
Elevation: 734' MSL  
Installed: July 21, 1990  
State Well #: 4410014-024  
Completed Depth: 540'





**SAN LORENZO VALLEY WATER DISTRICT**  
**BULK WATER SALES**  
**GALLONS**  
**June 2019**



<u>Month</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>
January	26,928	76,296	109,965	63,850	16,456	41,888	74,800
February			144,364	72,556	18,700	61,366	37,400
March	5,984	78,540	142,868	66,572	32,164	40,392	39,644
April			152,592	93,500	29,920	63,580	41,140
May	21,692	119,680	166,804	100,232	112,948	81,532	29,172
June		103,972	240,983	415,140	203,179	118,184	92,004
July	35,904	178,772	239,360	497,420	357,544	210,188	
August		435,336	688,160	746,504	433,092	279,004	
September	81,352	1,026,256	787,644	672,183	336,570	166,804	
October		725,560	893,112	246,840	195,976	215,424	
November	134,640	466,752	579,700	71,060	56,848	110,704	
December		183,260	203,456	47,124	42,636	44,132	
<b>Totals</b>	<b>306,500</b>	<b>3,394,424</b>	<b>4,349,008</b>	<b>3,092,981</b>	<b>1,836,033</b>	<b>1,433,198</b>	<b>314,160</b>

SAN LORENZO VALLEY WATER DISTRICT  
MONTHLY LEAK REPORT  
JUNE 2019

Leak Type	Location - NORTH SYSTEM	Town	Gallons Lost
400 MAIN LEAKING	HWY 9 & MARSHALL CREEK	BEN LOMOND	720
400 MAIN LEAKING	520 HILL CREST	BEN LOMOND	1440
400 MAIN LEAKING	7171 HIHN RD.	BEN LOMOND	26,400
400 MAIN LEAKING	SCENIC WAY	BEN LOMOND	500
400 MAIN LEAKING	1500 TWO BAR RD.	BEN LOMOND	8,640
411 TANK OVERFLOWING	HIGHLAND DR.	BEN LOMOND	-
400 MAIN LEAKING	8074 FERNWOOD	BEN LOMOND	4,320
400 MAIN LEAKING	15845 KINGS CREEK RD	BOULDER CREEK	1,440
400 MAIN LEAKING	14215 BEAR CREEK RD	BOULDER CREEK	57,600
400 MAIN LEAKING	660 STEWART ST	BOULDER CREEK	5,160
400 MAIN LEAKING	13401 BIG BASIN WAY	BOULDER CREEK	2,880
400 MAIN LEAKING	BETWEEN RIVER DR. DIRT PART WE TINK 840	BOULDER CREEK	1,080
412 TANK LEAKING	NINA TANKS	BOULDER CREEK	3,000
400 MAIN LEAKING	955 CREEK DR	BOULDER CREEK	4,320
400 MAIN LEAKING	GARRAHAN PARK	BOULDER CREEK	14,400
400 MAIN LEAKING	251 SUNBEAM	BOULDER CREEK	4,500
400 MAIN LEAKING	11181 HWY 9 & LARKSPUR DR.	BROOKDALE	4,800
400 MAIN LEAKING	ALAMEDA AVE	BROOKDALE	12,000
Total North			153,200
FELTON SYSTEM			
400 MAIN LEAKING	751 BUCKEYE DR	FELTON	100
400 MAIN LEAKING	10585 VERA AVE	FELTON	12,000
Total Felton			12,100
LOMPICO			
Total Lompico			-
SCOTTS VALLEY			
Total Scotts Valley			-
Total All Systems			165,300

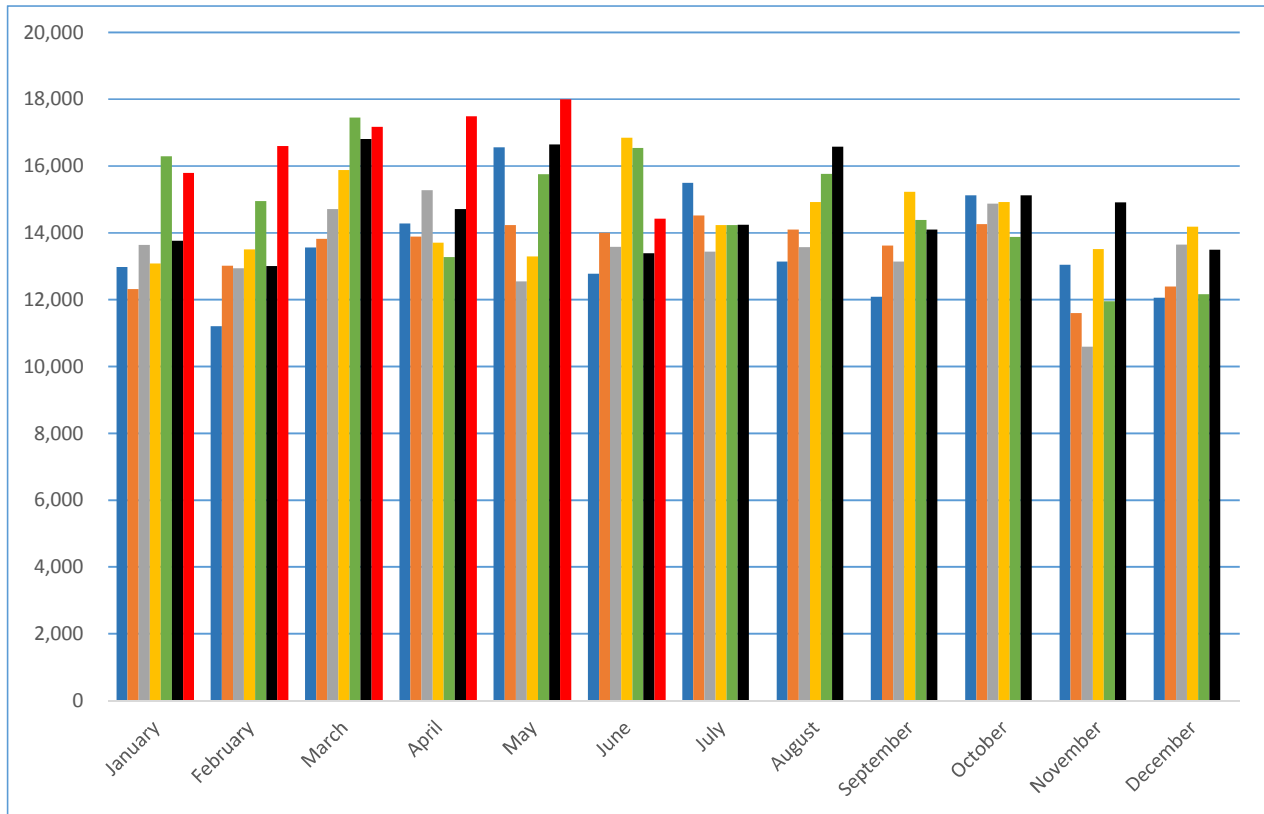
## SLV Monthly Water Quality Service Order Summary

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# SAN LORENZO VALLEY WATER DISTRICT

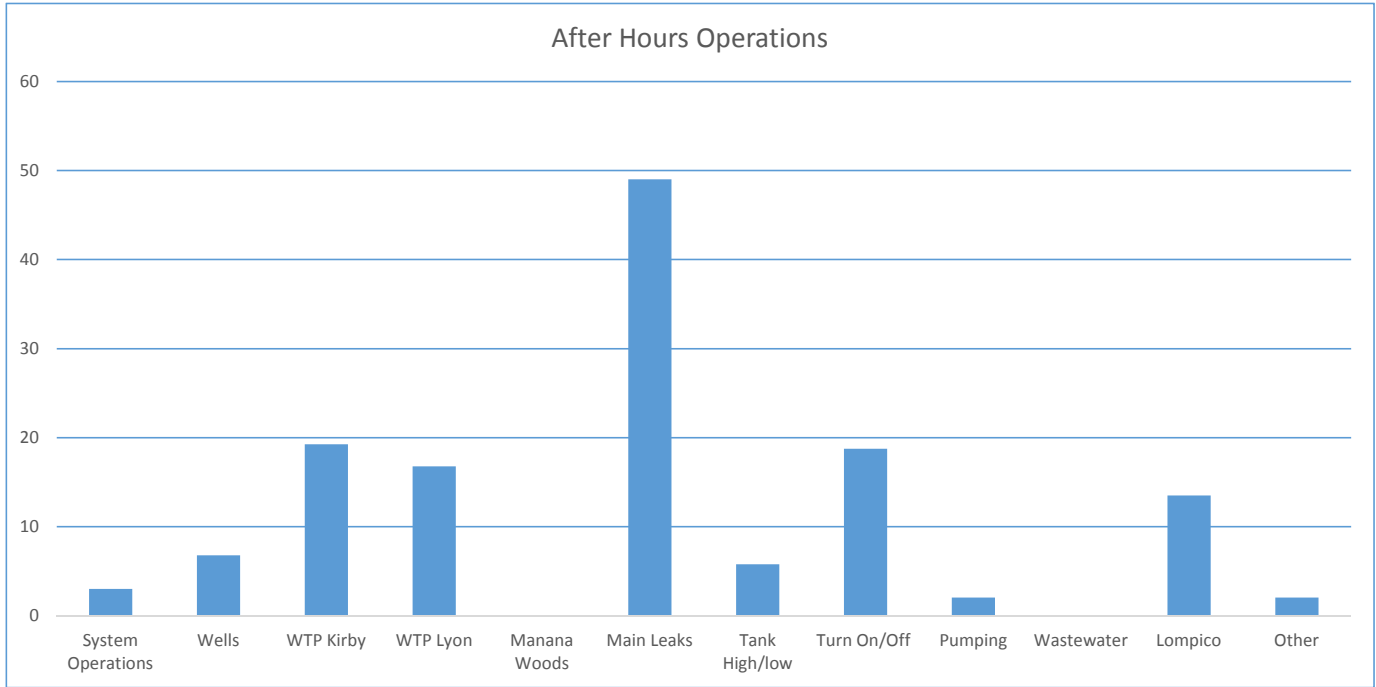
## VEHICLE MILEAGE

### June 2019



<u>Month</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>
January	12,976	12,317	13,633	13,082	16,286	13,763	15,790
February	11,201	13,015	12,934	13,505	14,945	13,003	16,599
March	13,558	13,817	14,714	15,882	17,451	16,809	17,167
April	14,283	13,883	15,279	13,704	13,270	14,711	17,488
May	16,560	14,228	12,550	13,290	15,757	16,646	17,998
June	12,780	14,000	13,582	16,841	16,534	13,390	14,420
July	15,497	14,519	13,441	14,228	14,229	14,242	
August	13,136	14,096	13,569	14,923	15,761	16,576	
September	12,087	13,622	13,137	15,229	14,388	14,094	
October	15,120	14,261	14,868	14,924	13,880	15,126	
November	13,046	11,594	10,591	13,510	11,952	14,908	
December	12,060	12,394	13,648	14,187	12,158	13,492	
Totals	162,304	161,746	161,946	173,305	176,611	176,760	99,462

**SAN LORENZO VALLEY WATER DISTRICT**  
**OPERATIONS DEPARTMENT**  
June 2019

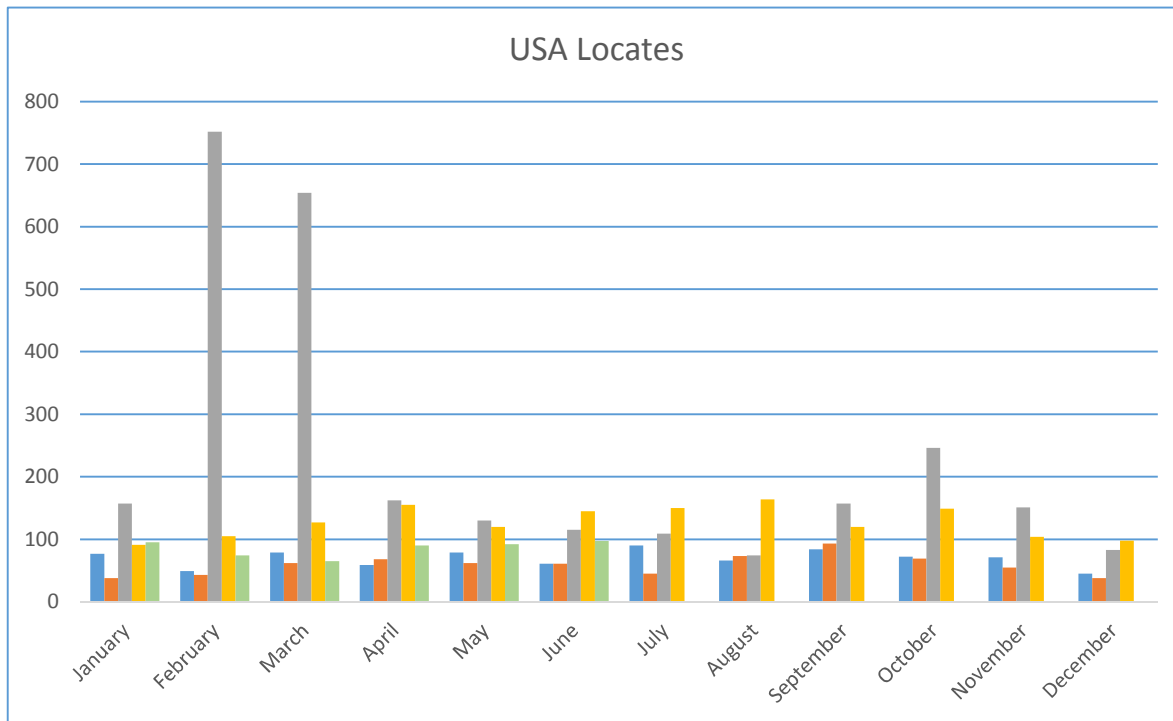


Description	Hours		2015	2016	2017	2018	2019
System Operations	3	January	N/A	145.00	280.75	90.50	96.50
Wells	6.75	February	N/A	86.50	192.25	72.00	180.00
WTP Kirby	19.25	March	N/A	153.75	105.75	80.25	106.25
WTP Lyon	16.75	April	82.50	72.00	128.75	156.75	76.25
Manana Woods	0	May	104.75	49.25	132.75	105.5	82.5
Main Leaks	49	June	172.50	83.25	112.75	89.00	136.75
Tank High/low	5.75	July	124.25	80.25	162.00	145.25	
Turn On/Off	18.75	August	111.75	81.25	141.25	134.5	
Pumping	2	September	230.25	175.00	201.25	155.25	
Wastewater	0	October	128.25	78.50	104.00	111.5	
Lompico	13.5	November	114.25	96.25	122.50	197.5	
Other	2	December	186.25	130.75	134.00	220.25	
Total	136.75		1254.75	1231.75	1818.00	1558.25	678.25

# SAN LORENZO VALLEY WATER DISTRICT

## OPERATIONS DEPARTMENT

### June 2019



<u>Month</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>
January	77	38	157	91	95
February	49	43	752	105	74
March	79	62	654	127	65
April	59	68	162	155	90
May	79	62	130	120	92
June	61	61	115	145	97
July	90	45	109	150	
August	66	73	74	164	
September	84	93	157	120	
October	72	69	246	149	
November	71	55	151	104	
December	45	38	83	98	
<b>Total to Date</b>	<b>832</b>	<b>707</b>	<b>2,790</b>	<b>1528</b>	<b>513</b>

